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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,882	05/26/2006	Akihiro Tada	TOYA151.001APC	7132

20995 7590 12/09/2009  
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EXAMINER
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CARTER, KENDRA D

ART UNIT	PAPER NUMBER
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1627

NOTIFICATION DATE	DELIVERY MODE
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12/09/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/580,882	<b>Applicant(s)</b> TADA ET AL.	
	<b>Examiner</b> KENDRA D. CARTER	<b>Art Unit</b> 1627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The Examiner acknowledges the applicant's remarks and arguments of August 19, 2009 made to the office action filed June 9, 2009. Claims 1-4, 10 and 11 are pending. Claims 1 is amended and claims 10 and 11 are new. Claims 5-9 are cancelled.

Newly submitted claims 10 and 11 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the new claims are directed toward a method, whereas the claims examined previously are drawn to a composition. The unity of invention is broken between the two invention by the Suzuki et al. (JP 11246339 A) reference used as art in the previous rejection.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 10 and 11 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The declaration of Tada has been considered and persuasive to overcome the previous rejections. Particularly, the amounts of the compound of formula 1 are insufficient to what is currently claimed.

In light of the amendments and declaration, all previous rejections are withdrawn.

Due to the withdrawal of all previous rejections and further consideration, the new rejections are made below. Since the obviousness-double patenting rejection below was not made previously, the rejections below constitute a NEW NON-FINAL office action.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1, 5 and 6 of copending Application No. 12/305,356 ('356) in view of Ishida et al. (EP 1147764 A2) and Torihara et al. (JP 07-002643).

This is a provisional obviousness-type double patenting rejection.

Application '356 teaches a external skin composition comprising a triterpenic acid or a derivative thereof in the range of 0.1 to 5% by mass (see claims 1 and 6); and 4-n-butylresorcinol (see claim 5).

Application '356 does not teach the specific compounds of formula 1 or the amounts of 4-n-butylresorcinol.

Ishida et al. teach a skin composition comprising 0.00005 to 10 wt% of polymethoxyflavone (compound of formula 1), which has excellent whitening effects, allow the skin to retain moisture for a long time, vitalizes the skin, suppresses wrinkles and has excellent storage stability (see abstract and page 3, compound I).

Torihara et al. teach that 4-n-butylresorcinol is an excellent skin whitening agent between the amounts of 0.1 to 10.0 wt% (see abstract).

To one of ordinary skill in the art at the time of the invention would have found it obvious and motivated to combine the composition of '365 and the compounds of formula I because the compounds of formula I are a triterpenic acid derivative and Ishida et al. teach that the compounds of formula I are excellent whitening effects.

In regards to the amounts, Ishida et al. teaches the compounds of formula I as a whitening agent between 0.00005 to 10 wt%. The Application '365 teach that the triterpenic derivative be in the range of 0.1 to 5% by mass. Lastly, Torihara et al. teach 4-n-butylresorcinol as a whitening agent between the range of 0.1 to 10.0 wt%. It is the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida et al. (EP 1147764 A2) in view of Torihara et al. (JP 07-002643).

Ishida et al. teach a skin composition comprising 0.00005 to 10 wt% of polymethoxyflavone (compound of formula 1), which has excellent whitening effects, allow the skin to retain moisture for a long time, vitalizes the skin, suppresses wrinkles and has excellent storage stability (see abstract and page 3, compound I). The cosmetic composition can comprise ascorbic acid, hydroquinone, and kojic acid, which are known as whitening components. The whitening effect can be synergistically enhanced by using these whitening components and polymethoxyflavone together (see paragraph 36).

Ishida et al. does not teach the specific compounds of claim 2, 4-n-butyl resorcinol (claim 1), or that the compounds of formula 1 are from the sources in claim 3 and 4.

Torihara et al. teach that 4-n-butylresorcinol is an excellent skin whitening agent between the amounts of 0.1 to 10.0 wt% (see abstract). 4-n-butylresorcinol is a better whitening agent than ascorbic acid and hydroquinone (see paragraph 6, table 3, paragraph 41, table 4, and paragraph 49).

To one of ordinary skill in the art at the time of the invention would have found it obvious and motivated to combine the composition of Ishida et al. and 4-n-butyl resorcinol because of the following teachings: 1) Ishida et al. teaches that the

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compositions of formula I can be combined with conventional skin whitening compounds such as ascorbic acid and hydroquinone; and 2) Torihara et al. teach that 4-n-butylresorcinol is a better whitening agent than ascorbic acid and hydroquinone. Thus, one would be motivated to replace the conventional whitening agents such as ascorbic acid and hydroquinone with 4-n-butylresorcinol because it is a better whitening agent.

In regards to the amounts, Ishida et al. teaches the compounds of formula I as a whitening agent between 0.00005 to 10 wt%, and Torihara et al. teach 4-n-butylresorcinol as a whitening agent between the range of 0.1 to 10.0 wt%. It is the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages. See In re Boesch, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980) (“[D]iscovery of an optimum value of the result effective variable in a known process is ordinarily within the skill of the art.” See, e.g., In re Baird, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). *In re Paterson* Appeal No. 02-1189 (Fed. Cir. January 8, 2003). It is noted that “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955.)

To one of ordinary skill in the art at the time of the invention would have found it obvious and motivated to combine the composition of Ishida et al. and the specific



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compounds of claim 2 because Ishida et al. teach that polymethoxyflavone, which encompasses the claimed compounds, are excellent skin whitening agents (see claims 16 and 35). Selection of a known material based on its suitability for its intended use is obvious absent a clear showing of unexpected results attributable to the Applicant's specific selection. See e.g., *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

To one of ordinary skill in the art at the time of the invention would have found it obvious and motivated to combine the composition of Ishida et al. and to isolate the compounds of formula 1 from the sources in claim 3 and 4, because the active ingredient is still present. In other words, regardless of its source, the same active ingredient is extracted.

### ***Conclusion***

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENDRA D. CARTER whose telephone number is (571)272-9034. The examiner can normally be reached on 9:00 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kendra D Carter/  
Examiner, Art Unit 1627

/SREENI PADMANABHAN/  
Supervisory Patent Examiner, Art Unit 1627